

REMARKS

This Amendment responds to the Office Action dated July 26, 2006 in which the Examiner rejected claims 1-21 under 35 U.S.C. §112, second paragraph, and under 35 U.S.C. §103.

As indicated above, the claims have been amended in order to more particularly point out and distinctly claim the subject matter which the Applicant regards as the invention. Therefore, Applicant respectfully requests the Examiner withdraws the rejection to claims 1-21 under 35 U.S.C. §112, second paragraph.

Claims 1, 3, 8, 15, 19 and 20 were rejected under 35 U.S.C. §103 as being unpatentable over *Fischer* (U.S. Patent No. 6,470,387) in view of *Yacoub* (U.S. Patent No. 6,552,813).

Fischer appears to disclose locating networked devices based on user usage of those devices. (Column 1, lines 8-9). Asset locator 12 reports a location 225 or, significantly, further refines the actual probable location of the asset by identifying other users that are using and/or have used the asset. (Column 6, lines 23-25). Referring to FIG. 5, once a query for an asset location is initiated 410, if a network asset record 305 is already updated 415 in database 14, then the asset's possible physical locations 320, 325, 330 and usage data 322, 327, 332 are referenced 425. Next, the probable location of the asset is calculated 430. This method may be as simple as selecting the possible device location field 320 with the highest usage number 322, or as complicated as statistically calculating and plotting each of the possible device locations and usage numbers to determine a most probable location of the asset. In either case, once the calculation is complete, the asset's probable location is reported 435. In short, the calculated probable location 430, 435 is simply

a determination based on user usage of the device because the device is typically located near to or in the general area of the user or users' locations. Asset locator 12 reports the probable asset's location by displaying the location on computer 15, by printing it, by storing it, or by otherwise manipulating the reported data as needed to enable tracking of that device. (Column 7, lines 22-40).

Thus, *Fischer* merely discloses an asset locator 12 which refines the actual probable location of an asset by identifying other users that are using and/or have used the asset. Nothing in *Fischer* shows, teaches or suggests the logical distance of each printer decreases as the usage frequency increases as claimed in claims 1 and 8 (and claims 6, 9 and 14). Rather, *Fischer* only discloses refining a probable location by identifying other users that are using or have used the asset.

Also, *Fischer* merely discloses determining an asset's location by identifying users that have used the asset in order to determine the probable location of the asset (column 7, lines 27-31). Nothing in *Fischer* shows, teaches or suggests a) obtaining a logical distance by compensating a physical distance according to the usage frequency of each printer as claimed in claim 1 (and claim 6, 9 and 14) or b) obtaining a logical distance by compensating the obtained physical distance information according to the number of times each printer receives a printing job as claimed in claim 8. Rather, *Fischer* merely discloses determining an assets location by identifying the users that have used the asset.

Yacoub appears to disclose networking of printers. (Column 1, lines 8-9) A virtual printer, as part of a client generating a print job, receives preferences from a user regarding the print job such as image quality and/or speed. The virtual printer automatically determines which printer of the printers on the network comply with the

print job preferences. The virtual printer then selects an appropriate printer which complies with the preferences and is located physically near the user/client.

(Column 2, lines 8-14) The virtual printer/server will access a coordinate mapped list of the physical locations of each printer. The topmost ranked printer according to speed and quality will be indexed with the coordinate (X_1, Y_1) . The user or workstation generating the print job can also be identified by a coordinate location by accessing a similar coordinate map list for workstations, and has a coordinate (X_2, Y_2) . The distance between the topmost ranked printer and the user/workstation is determined by server/virtual printer computing the formula $\sqrt{(X_2 - X_1)^2 + (Y_2 - Y_1)^2}$.

If the second ranked printer is determined by the virtual printer/server to be equally or closely capable with the topmost ranked printer, then the distance of the second ranked printer (coordinate (X_3, Y_3)) is determined according to the formula

$\sqrt{(X_3 - X_2)^2 + (Y_3 - Y_2)^2}$. This distance is compared with the distance from the user to the topmost ranked printer to determine which of the two printers is most "appropriate" printer complying with the user's speed/quality preferences and closer than other printers of similar capability. Each user or workstation may have a profile stored in the server or virtual printer which enables the server/virtual printer to decide how important distance to the printer is compared to speed/quality preferences. The case logic and artificial intelligence involved in determining which printer is most appropriate involves a combination of speed/quality and other job-related preferences with physical location (distance from the user), and can be implemented in a variety of methods and algorithms. (Column 5, line 64 through column 6, line 24).

Thus, since *Yacoub* only discloses using distance and quantity information to select a printer. Nothing in *Yacoub* shows, teaches or suggests the logical distance of each printer decreases as the usage frequency increases as claimed in claims 1 and 8 (and claims 6, 9 and 14). Rather, *Yacoub* only discloses selecting a printer based upon distance and quality.

Also, *Yacoub* merely discloses enabling a server to determine how important distance to a printer is compared to speed/quality preferences (Column 6, line 16-19). Nothing in *Yacoub* shows, teaches or suggests obtaining a logical distance by compensating physical distance information according to usage frequency as claimed in claims 1 and 8 (and claims 6, 9 and 14). Rather, *Yacoub* merely discloses using distance and quality information to select a printer.

Since neither *Fischer* or *Yacoub* show, teach or suggest the primary features as claimed in claims 1 and 8, Applicant respectfully requests the Examiner withdraws the rejection to claims 1 and 8 under 35 U.S.C. §103.

Claims 3, 15, 19 and 20 recite additional features. Applicant respectfully submits that claims 3, 15, 19 and 20 would not have been obvious within the meaning of 35 U.S.C. §103 over *Fischer* and *Yacoub* at least for the reasons as set forth above. Therefore, applicant respectfully requests the Examiner withdraws the rejection to claims 3, 15, 19 and 20 under 35 U.S.C. §103.

Claims 2, 6, 7 and 18 were rejected under 35 U.S.C. §103 as being unpatentable over *Fischer* and *Yacoub* and further in view of *Kageyama et al.* (U.S. Patent No. 5,625,757).

As discussed above, neither *Fischer* nor *Yacoub* show, teach or suggest logical distance of each printer decreases as usage frequency increases as claimed in claim 6.

Kageyama et al. appears to disclose in FIG. 1 a construction of a printing system. The printing system comprises: terminal equipment (11, 12, 13; hereinafter, they are generally referred to as clients) such as workstation, personal computer, word processor, and the like for requesting a printing; a plurality of printers (1A, 1B, 17, 18, 19, etc.) which can be shared by the clients; one or more printer/spooler control servers (15, 16) for controlling the printing by the printers; and a distributed printing management server 14. (Column 14, lines 38-46) When there are a plurality of decided physical printers, the specification adequate printer retrieving unit adds the orders to those printers in accordance with the print speed of the printer and display. When the print speeds are equal, the printers are displayed in accordance with the registration order. It is also possible to add the orders in consideration of an amount of jobs which are outputted to each printer or a distance from the user to each printer in addition to the print speeds. In such a case, the user can easily select the desired printer. (Column 24, lines 26-35).

Thus, *Kageyama et al.* only discloses displaying printers on a display based on distance. Nothing in *Kageyama et al.* shows, teaches or suggests a logical distance of each printer decreases as the usage frequency increases as claimed in claim 6. Rather, *Kageyama et al.* only discloses displaying printers based upon distance from a user.

Also, *Kageyama et al.* merely discloses displaying printers on a display in accordance with a distance from a user to each printer so that a user can select a desired printer (Column 24, lines 26-35). Nothing in *Kageyama et al.* shows, teaches or suggests setting up an order of priority for printers based upon a logical distance as claimed in claim 6. Rather, *Kageyama et al.* merely discloses displaying printers based upon distance from a user.

Since nothing in *Fischer, Yacoub* and *Kageyama et al.* show, teach or suggest the primary features as claimed in claim 6, Applicant respectfully requests the Examiner withdraws the rejection to claim 6 under 35 U.S.C. §103.

Claims 2, 7 and 18 recite additional features. Applicant respectfully submits that claims 2, 7 and 18 would not have been obvious within the meaning of 35 U.S.C. §103 over *Fischer, Yacoub* and *Kageyama et al.* at least for the reasons as set forth above. Therefore, applicant respectfully requests the Examiner withdraws the rejection to claims 2, 7 and 18 under 35 U.S.C. §103.

Claims 4 and 5 were rejected under 35 U.S.C. §103 as being unpatentable over *Kageyama et al.* in view of *Fischer*.

As discussed above, nothing in *Kageyama et al.* shows, teaches or suggests a logical distance. Therefore, nothing in *Kageyama et al.* shows, teaches or suggests a logical distance assigned to each combination of printer and computer decreases as the usage frequency increases therebetween or setting up the order of priority based upon a logical distance as a function of physical distance between each computer and each printer and usage frequency between each printer and each computer as claimed in claims 4 and 5. Furthermore, nothing in *Kageyama et*

al. shows, teaches or suggests a selection unit for automatically selecting a printer based upon the order of priority set up as claimed in claim 5.

As discussed above, nothing in *Fischer* shows, teaches or suggests the logical distance assigned to each combination of printer and computer decreases as the usage frequency increases therebetween as claimed in claims 4 and 5.

Since nothing in *Kageyama et al.* or *Fischer* show, teach or suggest the primary features as claimed in claims 4 and 5, Applicant respectfully requests the Examiner withdraws the rejection to claims 4 and 5 under 35 U.S.C. §103.

Claims 16 and 17 were rejected under 35 U.S.C. §103 as being unpatentable over *Kageyama et al.* and *Fischer* in view of *Yacoub*.

Applicant respectfully traverses the Examiner's rejection of the claims under 35 U.S.C. §103. The claims have been reviewed in light of the Office Action, and for reasons which will be set forth below, applicant respectfully requests the Examiner withdraws the rejection to the claims and allows the claims to issue.

As discussed above, since nothing in primary references to *Kageyama et al.* and *Fischer* shows, teaches or suggests the primary features as claimed in claims 4 and 5, applicant respectfully submits that the combination of the primary references with the secondary reference to *Yacoub* would not overcome the deficiencies of the primary references. Therefore, applicant respectfully requests the Examiner withdraws the rejection to claims 16 and 17 under 35 U.S.C. §103.

Claims 9-10, 12-14 and 21 were rejected under 35 U.S.C. §103 as being unpatentable over *Yacoub* in view of *Fischer*.

As discussed above, nothing in *Yacoub* or *Fischer* show, teach or suggest the logical distance decreases as the frequency of information exchange increases

between each piece of information equipment as claimed in claims 9 and 14.

Therefore, Applicant respectfully requests the Examiner withdraws the rejection to claims 9 and 14 under 35 U.S.C. §103.

Claims 10, 12-13 and 21 recite additional features. Applicant respectfully submits that claims 10, 12-13 and 21 would not have been obvious within the meaning of 35 U.S.C. §103 over *Yacoub* and *Fischer* at least for the reasons as set forth above. Therefore, applicant respectfully requests the Examiner withdraws the rejection to claims 10, 12, 13 and 21 under 35 U.S.C. §103.

Claim 11 was rejected under 35 U.S.C. §103 as being unpatentable over *Yacoub* and *Fischer* and further in view of *Dmitri et al.* (U.S. Patent No. 6,351,685).

Applicant respectfully traverses the Examiner's rejection of the claim under 35 U.S.C. §103. The claim has been reviewed in light of the Office Action, and for reasons which will be set forth below, applicant respectfully requests the Examiner withdraws the rejection to the claim and allows the claim to issue.

As discussed above, since nothing in *Yacoub* and *Fischer* shows, teaches or suggests the primary features as claimed in claim 9, applicant respectfully submits that the combination of the primary references with the secondary reference to *Dmitri et al.* would not overcome the deficiencies of the primary reference. Therefore, applicant respectfully requests the Examiner withdraws the rejection to claim 11 under 35 U.S.C. §103.

Thus it now appears that the application is in condition for reconsideration and allowance. Reconsideration and allowance at an early date are respectfully requested.

If for any reason the Examiner feels that the application is not now in condition for allowance, the Examiner is respectfully requested to contact, by telephone, the applicant's undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed within the currently set shortened statutory period, Applicant respectfully petitions for an appropriate extension of time. The fees for such extension of time may be charged to our Deposit Account No. 02-4800.

In the event that any additional fees are due with this paper, please charge our Deposit Account No. 02-4800.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date: October 23, 2006

By:



Ellen Marcie Emas
Registration No. 32131

P.O. Box 1404
Alexandria, VA 22313-1404
703 836 6620